# iFORTE™

Even the mighty need the right protection! With unique game-changing patented technology, you can shift the power outside, rain or shine, dust, smoke and haze, with the iFORTE™!

**Light source**

TE™ 1.000W iSE White LED TRANSFERABLE ENGINE

**Light output**

up to 50.000 lm, 113.000 lx @5m, Cpulse™ special flicker free management for HD and UHD cameras, ready for 8K and 16K

**Zoom range**

5° - 55°

**Effects**

2 rotating gobo wheels, 2 color wheels, animation wheel, frost, iris, 6-facet circular and linear prisms, framing shutters

The most powerful member of the Robe iSeries, the IP65-rated iFORTE™ combines far-reaching output and feature-rich effects in a fully protected package, capable of handling all the challenges of being outdoors.

iFORTE™ negates the traditional weight penalty associated with IP-rated fixtures being only 1.5 kg heavier than the indoor FORTE™. With its class-leading form factor, size and appearance, and all the features and identical performance of the indoor original, iFORTE™ enables seamless integration with each other on the same bar if desired!

The ingenious ingress protection system has been specifically designed to allow standard maintenance and preparation procedures, such as TRANSFERABLE ENGINE exchange and gobo replacement without any additional tools, as gobo change or maintenance work can be done on-site.

The onboard RAINS™ (Robe Automatic Ingress Neutralization System) manages humidity, temperature and pressure control using an active monitoring system to automatically remove any moisture detected within the fixture and provides constant monitoring to ensure peak performance. iFORTE™ automatically runs a self-test every time it senses a cover was removed and replaced. This self-test, taking no more than 3 minutes, provides an error message if covers were not replaced correctly or locking screws were incorrectly tightened (Patent pending).

Their magnesium and aluminium alloy housing give a dust-free environment for the optics, eliminating the need for frequent cleaning, routine maintenance, and UV damage to plastic parts.

Ensuring lumen output remains at peak levels, even with the rigours of outdoor performance, such as water, dirt, dust, haze and smoke, our exklusive parCoat™ (particle resistant coating) hydrophobic and oleophobic coating helps prevent such particles from sticking to the output lens. Furthermore, it allows easy removal without scratching or damage.

By including NFC (Near-Field Communication) technology, you can access setup, diagnostic and performance features, even when the fixture is not powered, directly from your mobile device using the Robe Com app.

iFORTE's TE™ 1.000W iSE HP (High Performance) White LED TRANSFERABLE ENGINE generates the same, piercing 50.000 lumen fixture output. The identical 11:1 zoom optical system, with a 5.5° to 55° zoom range, provides all the flexibility you require.

Removing the need for distracting pre-use pan and tilt calibration movement, our patented MAPS™ (Motionless Absolute Positioning System) allows the fixture to fully calibrate while remaining static. Very useful when fixtures are located within confined spaces.

Our cutting-edge CMY colour mixing system provides beautifully smooth mixing and transitions. Combined with two colour wheels, CRI 80 and 90 filters (HP Engine), and a variable CTO from 3.000 – 6.700 K give iFORTE™ total colour finesse.

With the patented Plano4™ four individual plane framing shutters, two fully indexable rotating gobo wheels, an animation wheel, two independent 6-facet prisms and two MagFrost 1° and 5° frosts, you have all the creative tools you need.

Keeping up with technological advances, we have incorporated Epass™ for maintaining network connectivity, and for television users, Cpulse™ is included for flicker-free management of HD and UHD camera systems.

iFORTE™ is fully compatible with our industry-leading RoboSpot™ remote-controlled follow spot system.

iFORTE™ - Robe reliability in all weathers.

# Technical Specification

## Source

- Light source type: TE™ 1.000W iSE HP White LED Engine (Patented)

  - HP - High Performance Engine for maximum light output and optimal colour characteristics

  - LED Engine output: 82.000 lm

  - Fixture total lumen output:

    - 50.000 lm (integrating sphere)

    - 40.000 lm (goniophotometer)

  - Colour temperature output: 6.700 K

  - CRI: 70, remotely selectable filters for CRI 80 and CRI 90

  - Illuminance: 113.000 lx @ 5 m

- Light source type: TE™ 1.000W iSE HCF White LED Engine (Patented)

  - HCF - High Colour Fidelity Engine for the best light quality and colour reproduction

  - LED Engine output: 55.000 lm

  - Fixture total lumen output:

    - 35.000 lm (integrating sphere)

    - 28.000 lm (goniophotometer)

  - Colour temperature output: 6.000K

  - CRI: 96, TLCI: 97, TM-30-18 Rf: 92, TM-30-18 Rg: 99

  - Illuminance: 78.000 lx @ 5 m

- LED life expectancy: min. 50.000 hours
- Typical lumen maintenance: L70/B50 @ 50.000 hours
- Light source warranty: 4 years or 20.000 hours

## Optical system

- Robe's proprietary optical design
- High-efficiency 13-lens zoom optical system, ratio: 11:1
- Zoom range: 5° - 55°
- Output lens diameter: 180 mm
- parCoat™ (particle resistant coating) unique hydrophobic and oleophobic coating helps prevent water, dirt, dust, haze and smoke from sticking to the output lens

## Dynamic Effects and Features

- Cyan: 0 - 100%

- Magenta: 0 - 100%

- Yellow: 0 - 100%

- Variable CTO: 3.000K - 6.700K

- Colour Wheel 1: 5 fixed dichroic colours+ white

- Colour Wheel 2: 5 fixed dichroic colours + white

- Framing shutters: Patented Plano4™ framing shutters module with 4 individually positionable blades plus rotation of the complete frame system + - 60°

- Rotating gobo wheel 1: 6 rotating, indexable and replaceable breakup and aerial gobos + open, patented slot & lock system

- Rotating gobo wheel 2: 6 rotating, indexable and replaceable breakup and aerial gobos + open, patented slot & lock system

- Animation wheel: Aluminium animation wheel, used alone or in combination with gobos, rotating in both directions at variable speed

- Prism 1: Independent 6 facet linear prism rotating in both directions at variable speed

- Prism 2: Independent 6 facet circular prism rotating in both directions at variable speed

- Frosts: MagFrost™ - magnetic paddle fast change system providing exchangeable frosts containing as standard a very light 1° for instant softening of the projected gobo or framing shutters, and a medium 5° for even wash, both specifically selected for theatre and TV use

- Hot-Spot: From flat field to 6:1 hot-spot (optional)

- Iris: Motorized, stepless, pulse effects up to 3 Hz

- Motorized zoom and focus

- Electronic strobe effect with variable speed up to 20 Hz, pre-programmed random strobe & pulse effects

- High resolution electronic dimming: 0 - 100%

- L3™ - (Low Light Linearity) Imperceptible 18 bit dimming for ultra smooth fade to black

- Extremely quiet operation suitable for all types of production in Theatre and TV

- Cpulse™ special flicker-free management for HD and UHD cameras, ready for 8K and 16K

- AirLOC™ (Less Optical Cleaning) technology greatly reduces the level of airborne particles drawn over the optical elements. This increases the overall performance, light quality and time between routine cleaning and maintenance.

## Control and programming

- Setting & Addressing: ROBE Navigation System 2 (RNS2)

- Display: QVGA Robe touch screen with battery backup, gravitation sensor for auto screen positioning, operation memory service log with RTC, stand-alone operation with 3 editable programs (each up to 100 steps), built-in analyser for easy fault finding, NFC app controller

- Protocols: USITT DMX-512, RDM, ArtNet, MA Net, MA Net2, sACN

- REAP™ - Robe Ethernet Access Portal

- Wireless CRMX™ technology from Lumen Radio

- Epass™: Ethernet pass through switch which sustains Ethernet integrity, when the fixture has no power, to automatically maintain network connectivity

- RAINS™ (Robe Automatic Ingress Neutralization System) manages humidity, temperature and pressure control using an active monitoring system to automatically remove any moisture detected within the fixture and provides constant monitoring to ensure peak performance

- DMX Protocol modes: 1

- Control channels: 54
- Pan & Tilt resolution: 16 bit
- CMY & CTO: 8 bit
- Colour wheel positioning: 16 bit
- Framing shutters module movement & rotation: 8 bit
- Rotating gobo wheel positioning: 8 bit
- Gobo indexing & rotation: 16 bit
- Animation wheel: 8 bit
- Animation wheel rotation: 8 bit
- Iris: 16 bit
- Frost: 8 bit
- Zoom: 16 bit
- Focus: 16 bit
- Dimmer: 16 bit (internal 18 bit)

## Movement

- Pan movement: 540°
- Tilt movement: 270°
- Movement control: Standard and Speed
- Controllable speed of Pan & Tilt movement
- EMS™: Electronic Motion Stabilizer system for Pan & Tilt reducing beam deviation caused by truss movement or vibration (Patented)
- Automatic Pan & Tilt position correction
- MAPS™ - Motionless absolute positioning system for Pan and Tilt (Patent pending)

## Rotating gobos

- 12x fully rotating, indexable glass gobos on two wheels
- Outside diameter: 30.8 mm
- Image diameter: 25.0 mm
- Thickness: 1.1 mm
- Max. thickness: 3.5 mm
- High temperature borofloat or better glass
- Slot & lock system for easy replacement of gobos

## Effect wheel

- Single animation wheel
- Material: Aluminium
- Diameter: 112 mm
- Can be used alone or in combination with rotating gobos

- Rotating in both directions at variable speed

## Framing shutters system

- Patented Plano4™ framing shutters module
- Shutters: 4 Blades, each with separate movement and +- 25° rotation control
- Movement: Smooth with variable speed, ultra-fast for creating mid-air effects
- Rotation: +- 60° of the complete framing system

## Thermal specification

- Maximum ambient temperature: 45°C (113°F)
- Maximum surface temperature: 100°C (212°F)
- Minimum operating temperature: -5°C (23°F)

## Electrical specification and connections

- Power supply: Electronic auto-ranging
- Input voltage range: 100-240 V, 50/60 Hz
- Power consumption: max. 1250 W
- Power connector in: IP65 Neutrik powerCON TRUE1
- DMX and RDM data in/out: IP65 Locking 3-pin & 5-pin XLR connectors
- Ethernet port in: IP65 RJ45 connector
- Ethernet port in/out: RJ45, for Embedded Epass™ switch 10/100 Mbps

## Approvals

- CE Compliant
- cETLus Compliant

## Mechanical specification

- Height: 856 mm (33.7") - head in vertical position
- Width: 480 mm (18.89")
- Depth: 335 mm (13.1") - head in vertical position
- Weight: 42.5 kg (93.7 lbs)
- Ingress protection rating: IP65

## Rigging

- Mounting positions: 0°, 32°, 90°
- Universal operating position
- Mounting points: 5 pairs of 1/4-turn locking points

- 2x Omega adaptors with 1/4-turn quick locks
- Safety cable attachment point
- Pan & Tilt transport locks

## Included items

- User Manual
- Omega Adaptor CL-regular 2 pcs
- Power cord including powerCON TRUE1 In connector

## Optional accessories

- Frost 0.5° (exchange) assembled: 10980581
- Frost 1° (exchange) assembled: 10980564
- Frost 5° (exchange) assembled: 10980565
- Frost 10° (exchange) assembled: 10980556
- Frost 20° (exchange) assembled: 10980577
- Frost 30° (exchange) assembled: 10980582
- Hot-Spot lens in gobo holder: 10980557
- Doughty Trigger Clamp: 17030386
- Safety wire 50 kg: 99011957
- Single Top Loader Case: 10120295
- Dual Top Loader Case: 10120296
- Foam Shell: 20020439

## Legal

- iFORTE™ is Registered Trademark of Robe lighting s. r. o.
- iFORTE™ is patented by Robe lighting s. r. o. and is protected by one or more pending or issued patents

# Gobos&Colours

## Rotating Gobo Wheel 1

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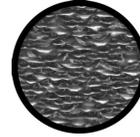
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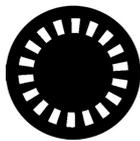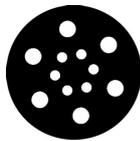
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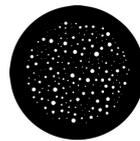
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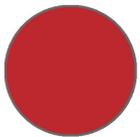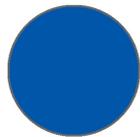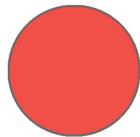
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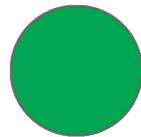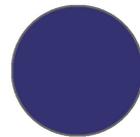
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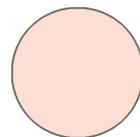
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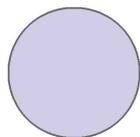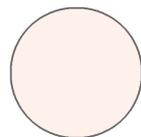
## Animation Wheel

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